## **CLAIMS**

## What is claimed is:

| 1  | 1.  | A system for lapping a head, comprising:   |
|----|-----|--|
| 2  | (a) | a wafer including at least one head each having an electrical lapping guide (ELG),   |
| 3  |     | a plurality of wafer contacts in electrical communication with the ELG, and a        |
| 4  |     | closure formed thereon defining a slot in which the wafer contacts are positioned;   |
| 5  | (b) | a lapping cable coupled to a testing device, the lapping cable including a plurality |
| 6  |     | of lapping cable contacts; and   |
| 7  | (c) | an adapter including a plurality of adapter contacts in electrical communication     |
| 8  |     | with the lapping cable contacts;   |
| 9  | (d) | wherein the adapter contacts are removably positionable in electrical                |
| 10 |     | communication with the wafer contacts during a lapping process.                      |
|    |     |  |

- 1 2. The system as recited in claim 1, wherein the adapter is constructed from a polyimide material.
- 1 3. The system as recited in claim 1, wherein adapter includes a pair of holes formed
  therein for coupling with a pair of holes formed in the lapping cable via a pair of
  alignment pins.

- 1 4. The system as recited in claim 1, wherein the adapter includes at least one guide
- for being removably positioned in a slot defined by closures of adjacent heads
- 3 formed on the wafer.
- 1 5. The system as recited in claim 1, wherein the adapter contacts are slidably
- 2 coupled to the adapter.
- 1 6. The system as recited in claim 1, wherein the adapter contacts each include a first
- 2 portion in electrical communication with one of the lapping cable contacts and a
- 3 second portion in electrical communication with one of the wafer contacts.
- 1 7. The system as recited in claim 6, wherein the first portion of each adapter contact
- is larger than the second portion of each adapter contact.
- 1 8. The system as recited in claim 7, wherein the first portion of each adapter contact
- 2 has a diameter larger than that of the second portion of each adapter contact.
- 1 9. The system as recited in claim 6, wherein the adapter includes a recess for
- 2 preventing contact with the wafer during the lapping process.
- 1 10. An system for lapping a head, comprising:

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| 2   | (a) | a wafer including at least one head each having an electrical lapping guide (ELG),   |
|-----|-----|--|
| 3   |     | a plurality of wafer contacts in electrical communication with the ELG, and a        |
| 4   |     | closure formed thereon defining a slot in which the wafer contacts are positioned;   |
| 5   |     | and  |
| 6   | (b) | a lapping cable coupled to a testing device, the lapping cable including a plurality |
| 7   |     | of lapping cable contacts extending outwardly therefrom;                             |
| 8   | (c) | wherein the lapping cable contacts are removably positionable in electrical          |
| 9   |     | communication with the wafer contacts during a lapping process.                      |
|     |     |  |
| 1   | 11. | The system as recited in claim 10, wherein the lapping cable includes at least one   |
| 2   |     | guide for being removably positioned in a slot defined by closures of adjacent       |
| 3   |     | heads formed on the wafer.   |
|     |     |  |
| . 1 | 12. | The system as recited in claim 10, wherein the lapping cable contacts extend in a    |
| 2   |     | direction perpendicular with respect to the lapping cable.                           |
|     |     |  |
| 1   | 13. | The system as recited in claim 10, wherein the lapping cable includes a recess for   |
| 2   |     | preventing contact with the wafer during the lapping process.                        |
|     |     |  |
| 1   | 14. | An apparatus for use with a wafer including at least one head each having an         |
| 2   |     | electrical lapping guide (ELG), a plurality of wafer contacts in electrical          |
| 3   |     | communication with the ELG, and a closure formed thereon defining a slot in          |

which the wafer contacts are positioned, and a lapping cable coupled to a testing

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| 5 | device, the lapping cable including a plurality of lapping cable contacts; the |
|---|--|
| 6 | apparatus comprising: an adapter including a plurality of adapter contacts in  |
| 7 | electrical communication with the lapping cable contacts, wherein the adapter  |
| 8 | contacts are removably positionable in electrical communication with the wafer |
| 9 | contacts during a lapping process.   |

- 1 15. An apparatus for use with a wafer including at least one head each having an 2 electrical lapping guide (ELG), a plurality of wafer contacts in electrical 3 communication with the ELG, and a closure formed thereon defining a slot in 4 which the wafer contacts are positioned, the apparatus comprising: 5 a lapping cable coupled to a testing device, the lapping cable including a plurality (a) 6 of lapping cable contacts extending outwardly therefrom in direction 7 perpendicular with respect to the lapping cable; 8 (b) wherein the lapping cable contacts are removably positionable in electrical
- 1 16. An adapter including a plurality of adapter contacts in electrical communication
  2 with a plurality of lapping cable contacts of the lapping cable, wherein the adapter
  3 contacts are removably positionable in electrical communication with a plurality
  4 of wafer contacts of a wafer during a lapping process.

communication with the wafer contacts during a lapping process.

1 17. A lapping cable coupled to a testing device and including a plurality of lapping cable contacts extending outwardly therefrom in a direction perpendicular with

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- respect to the lapping cable, wherein the lapping cable contacts are removably 3 positionable in electrical communication with a plurality of wafer contacts of a 4 wafer during a lapping process. 5
- An adapter including a plurality of adapter contacts in electrical communication 18. with a plurality of lapping cable contacts of the lapping cable, the adapter further 2 including at least one guide for being removably positioned in a slot defined by 3 closures of adjacent heads formed on the wafer, and a recess for preventing 4 contact with the wafer during the lapping process, wherein the adapter contacts 5 are removably positionable in electrical communication with a plurality of wafer 6 contacts of the wafer during a lapping process. 7
- A method for testing during a lapping process, comprising: 19. 1
- providing an adapter including a plurality of adapter contacts in electrical 2 (a)
- communication with a plurality of lapping cable contacts of the lapping cable; 3
- removably positioning the adapter contacts of the adapter in electrical 4 (b)
- communication with a plurality of wafer contacts of a wafer; 5
- lapping a surface of the wafer; and 6 (c)
- measuring a head of the wafer during the lapping process. 7 (d)